

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Central Regional Office • 627 Main Street, Worcester MA 01608 • 508-792-7650

DEVAL L. PATRICK Governor RICHARD K. SULLIVAN JR. Secretary

> DAVID W. CASH Commissioner

May 8, 2014

Northeast Energy Associates, LP 92B Depot Street Bellingham, MA 02019

Attn: Kirk Toth

Re: **FINAL APPROVAL of LPA** for Fuel Utilization Facility at Northeast Energy Associates, LP, 92B Depot Street, Bellingham, MA

Transmittal No: W151606-A

FMF No. 204943, FMF Classification: Operating Permit Source

SSEIS No. AQCR 120 Plant ID: 1550

Dear Mr. Toth:

The Massachusetts Department of Environmental Protection, Bureau of Waste Prevention ("MassDEP") has determined that the referenced Limited Plan Application ("LPA") is administratively complete and in conformance with current air pollution control engineering practices. MassDEP approves this LPA authorizing the temporary change in opacity limit for the electric generating facility located at 92 Depot Street in Bellingham, Massachusetts ("Facility").

This approval is issued in accordance with 310 CMR 7.02 of the Air Pollution Control Regulations ("Regulations") at 310 CMR 7.00, as adopted pursuant to M.G.L. c.111, sections 142A-142K.

Included as part of this approval are the following:

- Stamped Approved **BWP AQ 01-A** Application Form;
- Special Conditions (if any).
- General Conditions

Please review the approval carefully as it stipulates the conditions the facility owner/operator must adhere to.

MassDEP has determined that the filing of an Environmental Notification Form ("ENF") with the Secretary of Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act and Regulation 301 CMR 11.00, section 11.04, provide certain "Fail-Safe Provisions" which allow the Secretary to require the filing of an ENF and/or Environmental Impact Report at a later time.

I. FACILITY DESCRIPTION

The NEA Bellingham Facility ("the Facility") is a combined cycle electric power generating plant located at 92 Depot Street, Bellingham, Massachusetts. The Facility is owned and operated by Northeast Energy Associates, L.P. ("the Permittee"). The Facility utilizes natural gas or distillate fuel oil in two power "trains" to produce up to 305 megawatts electricity. Each train consists of a fuel fired turbine, followed by a steam generator.

II. PROJECT DESCRIPTION/HISTORY

On October 4, 2007, MassDEP issued a Plan Approval for LPA Transmittal No. W151606, authorizing a temporary opacity limit study at the Facility. The study was authorized to be conducted over an eighteen-month calendar period which expired in 2010. The Permittee did not conduct the opacity study during that period which expired in 2010.

On May 7, 2014, the Permittee sent a letter to MassDEP requesting a new study period to allow for conducting the opacity limit study. In response, MassDEP is re-issuing this Plan Approval as an Administrative Amendment Transmittal No. W151606-A to allow for a new period for the temporary opacity study.

The approved project consists of a temporary change in the opacity limit during certain modes of operation while a study is being conducted. The study will develop information on opacity during start up, shut down and during transient oil firing scenarios at the Facility. The evaluation will provide MassDEP and the United States Environmental Protection Agency (USEPA) with information on opacity during the noted modes of operation.

III. SPECIAL CONDITONS

- 1. The opacity study period shall extend from the date of this Plan Approval until March 31, 2015.
- 2. Each turbine combustor shall have a maximum of ten (10) operating events, [twenty (20) total combined for the two combustors]. An operating event shall consist of a single start-up, a single shutdown or a single transfer from natural gas to fuel oil firing.

- 3. During each startup, shutdown and fuel transfer event the Facility shall not exceed the requirements of MassDEP Air Pollution Control regulation 310 CMR 706(1)(a) -Visible Emissions.
- 4. 310 CMR 7.06(1)(a) states "No person shall cause, suffer, allow, or permit the emission of smoke which has shade, density, or appearance equal to or greater than No. 1 of the Chart for a period, or aggregate period of time in excess of six minutes during any one hour, provided that at no time during the said six minutes shall the shade, density, or appearance be equal to or greater than No. 2 of the Chart."
- 5. Within 30 days from the end of the evaluation period, the Facility shall submit a written report to MassDEP, Central Region, Bureau of Waste Prevention, Permit Section Chief. The report shall include continuous opacity readings as made by a Continuous Opacity Instrument throughout each single event, operating parameters during the event, actions taken to minimize the opacity during the event and any proposed modifications to the standard operating procedure to minimize opacity. The Facility may also propose an alternative opacity limit to be incorporated in the air quality plan approvals, provide the data justifies such a request.

IV. GENERAL CONDITIONS

- A. OPERATION No person shall operate a fuel utilization facility constructed, substantially reconstructed, or altered pursuant to 310 CMR 7.02 except in conformance with the requirements established therein and in conformance with the specific written plan approval requirements.
- B. SUSPENSION, MODIFICATION, AMENDMENT OR REVOCATION This approval may be suspended, modified, amended or revoked by MassDEP if, at any time, MassDEP determines that the facility is violating any condition or part of this approval. This approval may be modified or amended when in the opinion of MassDEP a modification or amendment is necessary or appropriate to clarify the approval conditions or after consideration of a written request by the Permittee to amend the approval conditions. Any relaxation of an emission limit or a specific condition noted in this approval that would result in an increase in emission rates as established in this approval must be made in accordance with 310 CMR 7.02.
- C. OTHER REGULATIONS This approval does not negate the responsibility of the owner/operator to comply with this or any other applicable federal, state, or local regulations now or in the future. Nor does this approval imply compliance with any other applicable federal, state or local regulation now or in the future.
 - This facility may be subject to the Federal New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60

Subpart Dc). This regulation covers boilers rated between 10 and 100 million Btu/hr. Since MassDEP has not accepted delegation for Subpart Dc, you are advised to consult with the EPA for additional information. There may be additional notification, record keeping and reporting requirements. The address is EPA-Air Branch, JFK Building, Boston, Massachusetts, 02203.

- D. EXISTING APPROVALS All plan approvals under 310 CMR 7.02 prior to the effective date of this approval shall continue to be in effect unless specifically changed by this approval letter. The facility shall meet the emission rates and approved conditions specified in the applicable plan approval(s) unless specifically altered by this approval.
- E. MONITORING Equipment or emission monitoring systems installed for the purpose of documenting compliance with this approval shall be installed, calibrated, maintained and operated by the Permittee in sufficient manner to ensure continuous and accurate operations at all time.

F. TESTING -

- 1) Any emission testing conducted to show compliance with the limitations in this approval must be conducted in accordance with the Environmental Protection Agency test methods as specified in the Code of Federal Regulations, Title 40, Part 60, Appendix A Standards of Performance for New Stationary Sources or by another method correlated to the above method to the satisfaction of MassDEP and in accordance with the requirements noted in 310 CMR 7.13.
- In accordance with 310 CMR 7.13, MassDEP may require testing for any pollutants if deemed necessary to ascertain the emission rates and relationship to equipment design and operation. When informed in writing by MassDEP that stack testing is necessary to ascertain compliance with the Air Pollution Control Regulations or design approval provisions the Permittee shall conduct the required stack testing. Such stack testing shall be:
 - a) Conducted by a person knowledgeable in stack testing, and
 - b) Conducted in accordance with procedures contained in a test protocol which has been approved by MassDEP, and
 - c) In the presence of a representative of MassDEP when such is deemed necessary in accordance with 310 CMR 7.13.

G. RECORD KEEPING -

1. A record keeping system shall be established and continued on site by the Permittee. All records shall be maintained up-to-date such that twelve-month rolling period information is readily available for Department examination. Record keeping shall, at a minimum, include:

- a. Fuel usage log. This log may consist of standard bills for fuel usage.
- b. Compliance records sufficient to demonstrate that emissions have not exceeded what are allowed by this approval. Such records may include daily production records, raw material usage rates, fuel purchase receipts, emissions test results, monitoring equipment data and reports.
- c. Maintenance: A record of routine maintenance activities performed on emission unit, control equipment and monitoring equipment including, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
- d. Malfunctions: A record of all malfunctions on emission unit, control equipment and monitoring equipment including, at a minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective action taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the emission unit returned to compliance.
- 2. All records shall be kept on site for five (5) years and shall be made available to MassDEP upon request.
- 3. Pursuant to the authority granted to MassDEP at 310 CMR 7.02, the facility must maintain a copy of this approval, and any subsequent modifications of this approval, onsite for as long as the approval is valid.
- H. COMPLIANCE ASSURANCE FEE Pursuant to 310 CMR 4.03, an annual fee, based on the Commonwealth's fiscal year, will be charged to your facility to cover the cost of compliance activities performed by MassDEP, including registrations, report reviews, inspections, source registration reviews, etc. No fee shall be charged in the fiscal year that the permit is issued. If multiple air quality permits exist for a facility, the facility shall pay the single highest applicable fee. This fee does not include stack test fees.

I. Appeal

This approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Approval. Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Approval is not consistent with applicable laws and regulations. The hearing request along with a valid check payable to Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to: Commonwealth of Massachusetts, MassDEP, Commonwealth Master Lock Box, P.O. Box 4062, Boston, MA 02241-3982. The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority. MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Plan Approval, please contact Paul Dwiggins at 508-767-2760.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Roseanna E. Stanley Acting Permit Chief Bureau of Waste Prevention

ecc: Yi Tian, MassDEP BOSTON